

Amendments to the Claims

13. (New) An audio signal recording disc encoded by a method which comprises the steps of:

implementing matrix operation between a first audio signal and a second audio signal to generate a first channel signal and a second channel signal correlating with each other, the first audio signal and the second audio signal relating to a same sampling frequency;

subjecting the first channel signal and the second channel signal to lossless encoding to convert the first channel signal and the second channel signal into an encoding-resultant signal from which a decoding side can reproduce the first audio signal and the second audio signal;

wherein the subjecting step comprises:

1) selecting a first sample among samples of the first channel signal for every prescribed interval of frame;

2) selecting a first sample among samples of the second channel signal for every prescribed interval of frame;

3) selecting one from first different linear prediction methods and predictively encoding the first channel signal according to the selected one of the first different linear prediction methods, wherein the first different linear prediction methods are of predicting the first channel signal from a past condition of the first channel signal for every prescribed interval of subframe which is a subdivision of the frame to generate first different prediction signals for the first channel signal, and generating first prediction-error signals representing differences between the first channel signal and the first different prediction signals respectively, and wherein the selected first linear prediction method generates a smallest of the first prediction-error signals;

4) selecting one from second different linear prediction methods and predictively encoding the second channel signal according to the selected one of the

second different linear prediction methods, wherein the second different linear prediction methods are of predicting the second channel signal from a past condition of the second channel signal for every prescribed interval of the subframe to generate second different prediction signals for the second channel signal, and generating second prediction-error signals representing differences between the second channel signal and the second different prediction signals respectively, and wherein the selected second linear prediction method generates a smallest of the second prediction-error signals; and

5) generating a signal of a predetermined format having a header information area and a user data area, where the user data area includes an audio packet having a packet header, and loading the audio packet with the selected first sample of the first channel signal, the selected first sample of the second channel signal, the smallest first prediction-error signal generated by the selected first linear prediction method, the smallest second prediction-error signal generated by the selected second linear prediction method, an information piece representing the selected first linear prediction method and an information piece representing the selected second linear prediction method.

14. (New) A method of recording data to or reproducing data from the audio signal recording disc according to claim 13.

15. (New) A method of network-based communication, comprising the steps of:
transmitting and receiving a signal of a predetermined transmission packet format to and from a communication line, wherein the signal has been generated by an audio signal encoding method comprising:

implementing matrix operation between a first audio signal and a second audio signal to generate a first channel signal and a second channel signal

correlating with each other, the first audio signal and the second audio signal relating to a same sampling frequency;

subjecting the first channel signal and the second channel signal to lossless encoding to convert the first channel signal and the second channel signal into an encoding-resultant signal from which a decoding side can reproduce the first audio signal and the second audio signal;

wherein the subjecting step comprises:

1) selecting a first sample among samples of the first channel signal for every prescribed interval of frame;

2) selecting a first sample among samples of the second channel signal for every prescribed interval of frame;

3) selecting one from first different linear prediction methods and predictively encoding the first channel signal according to the selected one of the first different linear prediction methods, wherein the first different linear prediction methods are of predicting the first channel signal from a past condition of the first channel signal for every prescribed interval of subframe which is a subdivision of the frame to generate first different prediction signals for the first channel signal, and generating first prediction-error signals representing differences between the first channel signal and the first different prediction signals respectively, and wherein the first linear prediction method selected generates a smallest of the first prediction-error signals;

4) selecting one from second different linear prediction methods and predictively encoding the second channel signal according to the selected one of the second different linear prediction methods, wherein the second different linear prediction methods are of predicting the second channel signal from a past condition of the second channel signal for every prescribed interval of the subframe to generate second different prediction signals for the second channel signal, and generating second prediction-error signals representing differences between the second channel signal and the second different prediction signals respectively, and

wherein the selected second linear prediction method generates a smallest of the second prediction-error signals; and

5) generating a signal of a predetermined format having a header information area and a user data area, where the user data area includes an audio packet having a packet header, and loading the audio packet with the selected first sample of the first channel signal, the selected first sample of the second channel signal, the smallest first prediction-error signal generated by the selected first linear prediction method, the smallest second prediction-error signal generated by the selected second linear prediction method, an information piece representing the selected first linear prediction method and an information piece representing the selected second linear prediction method.

16. (New) A method of reproducing data which is provided via the network-based communication according to claim 15.

Amendments to the Specification

Insert after the title of the invention:

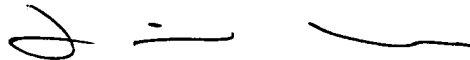
RELATED APPLICATIONS

This application is a divisional of U.S. application No. 10/096,276, filed March 13, 2002 which in turn is a divisional of U.S. application No. 09/394,688, filed September 13, 1999 now U.S. patent number 6,463,410.

Page 46, third full paragraph:

The embodiment of Fig. 15 includes a lossless encoder 2E and a lossless decoder 3E which replace the lossless encoder 2D and the ~~loss~~ lossless decoder 3D (see Fig. 1) respectively. The lossless encoder 2E follows a channel correlation circuit "A". The lossless decoder 3E precedes a channel correlation circuit "B".

Respectfully submitted,



Louis Woo, Reg. No. 31,730
Law Offices of Louis Woo
717 North Fayette Street
Alexandria, Virginia 22314
Phone: (703) 299-4090

Date: Nov 26, 2003